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ELECTRONIC HEALTH RECORDS

DOD and VA Interoperability Efforts Are Ongoing; Program Office Needs to Implement Recommended Improvements

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ELECTRONIC HEALTH RECORDS

DOD and VA Interoperability Efforts Are Ongoing; Program Office Needs to Implement Recommended Improvements

Why GAO Did This Study

The National Defense Authorization Act for Fiscal Year 2008 required the Department of Defense (DOD) and the Department of Veterans Affairs (VA) to accelerate their exchange of health information and to develop capabilities that allow for interoperability (generally, the ability of systems to exchange data) by September 30, 2009. It also required compliance with federal standards and the establishment of a joint interagency program office to function as a single point of accountability for the effort.

Further, the act directed GAO to semiannually report on the progress made in achieving these requirements. For this fourth report, GAO determined the extent to which (1) DOD and VA developed and implemented electronic health record systems or capabilities that allowed for full interoperability by September 30, 2009, and (2) the interagency program office established by the act is functioning as a single point of accountability. To do so, GAO analyzed agency documentation on project status and conducted interviews with agency officials.

What GAO Recommends

GAO is not making further recommendations at this time; DOD and VA need to implement the recommendations on program planning, scheduling, and performance measurement that GAO previously made. Commenting on a draft of this report, DOD, VA, and the interagency program office concurred with GAO's findings.

View GAO-10-332 or key components. For more information, contact Joel Willemssen at (202) 512-6253 or willemssenj@gao.gov.

What GAO Found

DOD and VA previously established six objectives that they identified as necessary for achieving full interoperability; they have now met the remaining three interoperability objectives that GAO previously reported as being partially achieved—expand questionnaires and self-assessment tools, expand DOD's inpatient medical records system, and demonstrate initial document scanning. As a result of meeting the six objectives, the departments' officials, including the co-chairs of the group responsible for representing the clinician user community, believe they have satisfied the September 30, 2009, requirement for full interoperability. Nevertheless, DOD and VA are planning additional actions to further increase their interoperable capabilities and address clinicians' evolving needs for interoperable electronic health records. Specifically,

- DOD and VA plan to meet additional needs that have emerged with respect to social history and physical exam data;
- DOD plans to further expand the implementation of its inpatient medical records system to sites beyond those achieved as of September 2009; and
- DOD and VA plan to test the capability to scan documents, in follow-up to their demonstration of an initial document scanning capability.

Additionally, in response to a Presidential announcement, the departments are beginning to plan for the development and implementation of a virtual lifetime electronic record, which is intended to further increase their interoperable capabilities.

The interagency program office is not yet positioned to function as a single point of accountability for the implementation of interoperable electronic health record systems or capabilities. The departments have made progress in setting up their interagency program office by hiring additional staff, including a permanent director. In addition, consistent with GAO's previous recommendations, the office has begun to demonstrate responsibilities outlined in its charter in the areas of scheduling, planning, and performance measurement. However, the office's effort in these areas does not fully satisfy the recommendations and are incomplete. Specifically, the office does not yet have a schedule that includes information about tasks, resource needs, or relationships between tasks associated with ongoing activities to increase interoperability. Also, key IT management responsibilities in the areas of planning and performance measurement remain incomplete. Among the reasons officials cited for not yet completing a schedule, plan, or performance measures were the office's need to focus on verifying achievement of the six interoperability objectives and participating in the departments' efforts to define the virtual lifetime electronic record. Nonetheless, if the program office does not fulfill key management responsibilities as GAO previously recommended, it may not be positioned to function as a single point of accountability for the delivery of future interoperable capabilities, including the development of the virtual lifetime electronic record.

_____ **United States Government Accountability Office**

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United States Government Accountability Office
Washington, DC 20548

January 28, 2010

Congressional Committees

The Department of Defense (DOD) and the Department of Veterans Affairs (VA) have long-standing efforts to increase sharing of data between their health information systems. However, while the departments have progressively increased electronic health information sharing, questions have been raised about when and to what extent the departments intend such sharing capabilities to be fully achieved. To expedite the exchange of electronic health information between the two departments, the National Defense Authorization Act for Fiscal Year 2008[1] included provisions directing DOD and VA to jointly develop and implement, by September 30, 2009, fully interoperable[2] electronic health record systems or capabilities that are compliant with applicable federal interoperability standards. Such systems and capabilities are important for making patient information more readily available to health care providers in the departments, reducing medical errors, and streamlining administrative functions. In addition, the act established an interagency program office to be a single point of accountability for the departments' efforts.

Further, the act directed us to assess DOD's and VA's progress in implementing the electronic health record systems and to semiannually report our results to the appropriate congressional committees. Accordingly, we issued reports in July 2008,[3] January 2009,[4] and

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[1] Pub. L. No. 110-181, § 1635 (2008).

[2] Interoperability is the ability of two or more systems or components to exchange information and to use the information that has been exchanged.

[3] See GAO, *Electronic Health Records: DOD and VA Have Increased Their Sharing of Health Information, but More Work Remains*, GAO-08-954 (Washington, D.C.: July 28, 2008). In this report, we highlighted the departments' progress in sharing electronic health information, developing electronic records that comply with national standards, and setting up the interagency program office.

[4] See GAO, *Electronic Health Records: DOD's and VA's Sharing of Information Could Benefit from Improved Management*, GAO-09-268 (Washington, D.C.: Jan. 28, 2009). In this report, we noted that DOD and VA have increased their sharing of health information, and defined plans to further increase their sharing of electronic health information. However, the plans did not identify results-oriented (i.e., objective, quantifiable, and measurable) performance goals and measures that are characteristic of effective planning.

July 2009[5] in response to the act. As agreed with the committees of jurisdiction, our objectives for this fourth report are to determine the extent to which (1) DOD and VA developed and implemented electronic health record systems or capabilities that allowed for full interoperability by the September 30, 2009, deadline and (2) the interagency program office established by the National Defense Authorization Act for Fiscal Year 2008 is functioning as a single point of accountability for developing and implementing electronic health records.

To accomplish these objectives, we reviewed our past work in this area; analyzed current agency documentation (including the departments' objectives for achieving interoperability, project status information, and the interagency program office charter); and conducted interviews with officials from DOD and VA.

We conducted this performance audit from September 2009 through January 2010, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. For more details on our scope and methodology, see appendix I.

Background

The use of information technology (IT) to electronically collect, store, retrieve, and transfer clinical, administrative, and financial health information has great potential to help improve the quality and efficiency of health care and is important to improving the performance of the U.S. health care system. Historically, patient health information has been scattered across paper records kept by many different caregivers in many different locations, making it difficult for a clinician to access all of a patient's health information at the time of care. Lacking access to these critical data, a clinician may be challenged to make the most informed

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[5]See GAO, *Electronic Health Records: DOD and VA Efforts to Achieve Full Interoperability Are Ongoing; Program Office Management Needs Improvement,* GAO-09-775 (Washington, D.C.: July 28, 2009). In this report, we found that DOD and VA had taken steps to meet six objectives that they identified for achieving full interoperability by September 30, 2009, but had additional work planned to fully meet the objectives. In addition, we noted that the DOD/VA Interagency Program Office was not effectively positioned to function as the single point of accountability for the implementation of fully interoperable electronic health records.

decisions on treatment options, potentially putting the patient's health at greater risk. The use of electronic health records can help provide this access and improve clinical decisions.[6]

Interoperability—the ability to share data among health care providers—is key to making health care information electronically available. Interoperability enables different information systems or components to exchange information and to use the information that has been exchanged. This capability is important because it allows patients' electronic health information to move with them from provider to provider, regardless of where the information originated. If electronic health records conform to interoperability standards, they can be created, managed, and consulted by authorized clinicians and staff across more than one health care organization, thus providing patients and their caregivers the necessary information required for optimal care. Unlike paper-based health records, electronic health records can provide decision support capabilities, such as automatic alerts about a particular patient's health, or other advantages of automation.

Interoperability depends on the use of agreed-upon standards to ensure that information can be shared and used. In the health IT field, standards may govern areas ranging from technical issues, such as file types and interchange systems, to content issues, such as medical terminology. DOD and VA have agreed upon numerous common standards that allow them to share health data. They have also participated in numerous standards-setting organizations tasked to reach consensus on the definition and use of standards. For example, DOD and VA officials serve as members and are actively working on several committees and groups within the Healthcare Information Technology Standards Panel.[7] The panel identifies

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[6]An electronic health record is a collection of information about the health of an individual or the care provided, such as patient demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data, and radiology reports.

[7]The panel was established in October 2005 as a public-private partnership funded by the Office of the National Coordinator. This panel is sponsored by the American National Standards Institute, which is a private, nonprofit organization whose mission is to promote and facilitate voluntary consensus standards and ensure their integrity.

and harmonizes[8] competing standards and develops interoperability specifications that are needed for implementing the standards.[9]
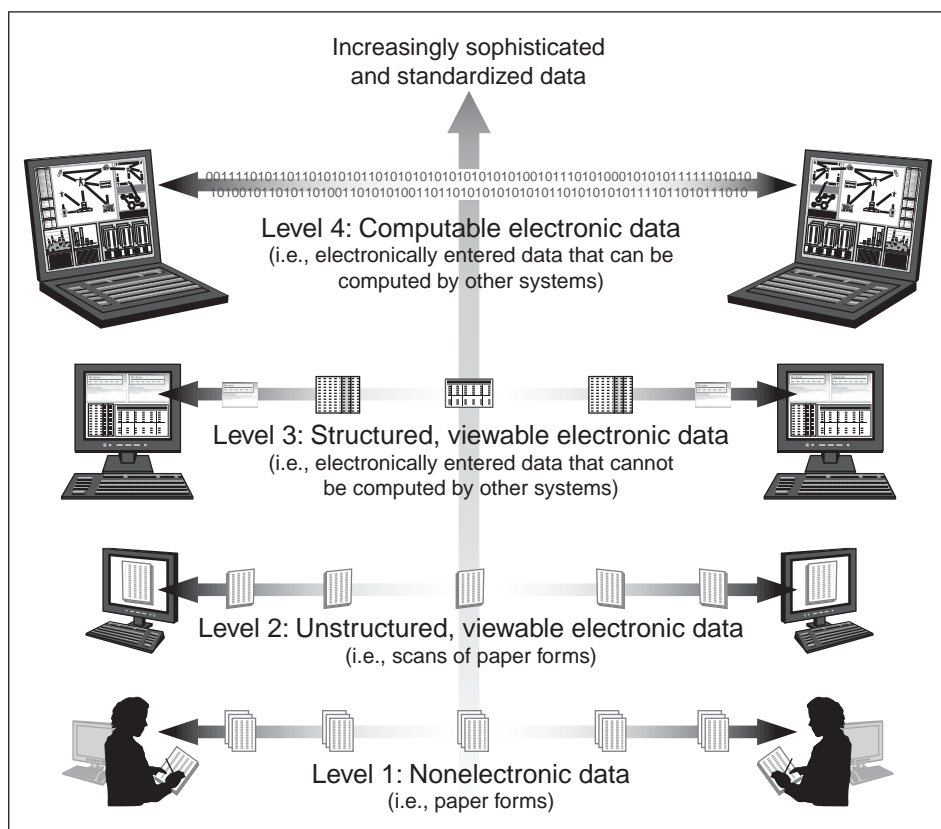
Interoperability can be achieved at different levels.[10] At the highest level, electronic data are computable (that is, in a format that a computer can understand and act on to, for example, provide alerts to clinicians on drug allergies). At a lower level, electronic data are structured and viewable, but not computable. The value of data at this level is that they are structured so that data of interest to users are easier to find. At still a lower level, electronic data are unstructured and viewable, but not computable. With unstructured electronic data, a user would have to search through uncategorized data to find needed or relevant information. Beyond these, paper records also can be considered interoperable (at the lowest level) because they allow data to be shared, read, and interpreted by human beings. According to DOD and VA officials, not all data require the same level of interoperability, nor is interoperability at the highest level achievable in all cases. For example, unstructured, viewable data may be sufficient for such narrative information as clinical notes. Figure 1 shows the distinction between the various levels of interoperability and examples of the types of data that can be shared at each level.

[8]Harmonization is the process of identifying overlaps and gaps in relevant standards and developing recommendations to address these overlaps and gaps.

[9]Developing, coordinating, and agreeing on standards are only part of the processes involved in achieving interoperability for electronic health records systems or capabilities. In addition, specifications are needed for implementing the standards, as well as criteria and a process for verifying compliance with the standards. An interoperability specification codifies detailed implementation guidance that includes references to the identified standards or parts of standards and explains how they should be applied to specific health care topic areas.

[10]These levels were identified by the Center for Information Technology Leadership, which was chartered in 2002 as a research organization established to help guide the health care community in making more informed strategic IT investment decisions. According to DOD and VA, the different levels of interoperability have been accepted for use by the Office of the National Coordinator for Health Information Technology.

Figure 1: Levels of Data Interoperability

Increasingly sophisticated
and standardized data

Level 4: Computable electronic data
(i.e., electronically entered data that can be
computed by other systems)

Level 3: Structured, viewable electronic data
(i.e., electronically entered data that cannot
be computed by other systems)

Level 2: Unstructured, viewable electronic data
(i.e., scans of paper forms)

Level 1: Nonelectronic data
(i.e., paper forms)

Source: GAO analysis based on data from the Center for Information Technology Leadership.

DOD and VA Efforts to Exchange Health Information Are Long-standing

DOD and VA have been working to exchange patient health information electronically since 1998. We have previously described their efforts on three key projects:[11]

- The Federal Health Information Exchange (FHIE), begun in 2001 and enhanced through its completion in 2004, enables DOD to electronically transfer service members' electronic health information to VA when the members leave active duty.

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[11]GAO-09-775.

- The Bidirectional Health Information Exchange (BHIE), established in 2004, was aimed at allowing clinicians at both departments viewable access to health information on shared patients—that is, those who receive care from both departments. For example, veterans may receive outpatient care from VA clinicians and be hospitalized at a military treatment facility.[12] The interface also allows DOD sites to see previously inaccessible data at other DOD sites.

- The Clinical Data Repository/Health Data Repository (CHDR)[13] interface, implemented in September 2006, linked the department's separate repositories of standardized data to enable a two-way exchange of computable outpatient pharmacy and medication allergy information. These repositories are a part of the modernized health information systems that the departments have been developing—DOD's AHLTA[14] and VA's HealtheVet.

In its ongoing initiatives to share information, VA uses its integrated medical information system—the Veterans Health Information Systems and Technology Architecture (VistA)—which was developed in-house by VA clinicians and IT personnel.[15] All VA medical facilities have access to all VistA information.

DOD currently relies on its AHLTA, which comprises multiple legacy medical information systems that the department developed from commercial software products that were customized for specific uses. For example, the Composite Health Care System (CHCS), which was formerly DOD's primary health information system, is still in use to capture

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[12]To create BHIE, the departments drew on the architecture and framework of the information transfer system established by the FHIE project. Unlike FHIE, which provides a one-way transfer of information to VA when a service member separates from the military, the two-way interface allows clinicians in both departments to view, in real time, limited health data (in text form) from the departments' existing health information systems.

[13]The name CHDR, pronounced "cheddar," combines the names of these two repositories.

[14]The department considers AHLTA the official name of the system. (It was formerly an abbreviation for Armed Forces Health Longitudinal Technology Application.) Previously, AHLTA was known as CHCS II.

[15]VistA began operation in 1983 as the Decentralized Hospital Computer Program. In 1996, the name of the system was changed to the Veterans Health Information Systems and Technology Architecture.

pharmacy, radiology, and laboratory order management.[16] In addition, the department uses Essentris (also called the Clinical Information System), a commercial health information system customized to support inpatient treatment at military medical facilities. Not all of DOD's medical facilities yet have this inpatient medical system.

DOD and VA Identified Interoperability Objectives and Formed an Interagency Program Office

As previously noted, the National Defense Authorization Act for Fiscal Year 2008 called for DOD and VA to jointly develop and implement, by September 30, 2009, electronic health record systems or capabilities that allow for full interoperability of personal health care information that are compliant with applicable federal interoperability standards. To facilitate compliance with the act, the departments' Interagency Clinical Informatics Board,[17] made up of senior clinical leaders who represent the user community, began establishing priorities for interoperable health data between DOD and VA. In this regard, the board is responsible for determining clinical priorities for electronic data sharing between the departments, as well as what data should be viewable and what data should be computable. Based on its work, the board established six interoperability objectives for meeting the departments' data sharing needs. According to the former acting director of the interagency program office, DOD and VA considered achievement of these six objectives, in conjunction with capabilities previously achieved (e.g., FHIE, BHIE, and CHDR), to be sufficient to satisfy the requirement for full interoperability by September 2009. The six objectives are listed in table 1.

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[16]According to DOD, CHCS applications are now accessed through its modernized health information system, AHLTA.

[17]This board was originally named the Joint Clinical Information Board.

Table 1: Description of DOD and VA Interoperability Objectives

Objective	Description	Associated interoperability level
Refine social history data	DOD will begin sharing with VA the social history data that are currently captured in the DOD electronic health record. Such data describe, for example, patients' involvement in hazardous activities and tobacco and alcohol use.	Level 3: Structured, viewable electronic data
Share physical exam data	DOD will provide an initial capability to share with VA its electronic health record information that supports the physical exam process when a service member separates from active military duty.	Level 3: Structured, viewable electronic data
Demonstrate initial network gateway operation	DOD and VA will demonstrate the operation of the secure network gateways[a] to support joint DOD-VA health information sharing.	There is no interoperability level associated with this objective.
Expand questionnaires and self-assessment tools	DOD will provide all periodic health assessment data stored in its electronic health record to VA such that questionnaire responses are viewable with the questions that elicited them.	Level 3: Structured, viewable electronic data
Expand Essentris in DOD	DOD will expand its inpatient medical records system (CliniComp's Essentris product suite) to at least one additional site in each military medical department (one Army, one Air Force, and one Navy for a total of three sites).	Level 2: Unstructured, viewable electronic data
Demonstrate initial document scanning	DOD will demonstrate an initial capability for scanning service members' medical documents into its electronic health record and sharing the documents electronically with VA.	Level 2: Unstructured, viewable electronic data

Source: GAO based on DOD and VA data.

[a]Secure network gateways provide expanded bandwidth to support information sharing and ensure secure and reliable data communications between DOD and VA health care facilities.

Also since April 2008, the departments have been working to set up an interagency program office to be accountable for their efforts to implement fully interoperable electronic health record systems or capabilities by the September deadline. In January 2009, the office completed its charter, articulating, among other things, its mission and functions with respect to attaining interoperable electronic health data. The charter further identified the office's responsibilities in carrying out its mission, in areas such as oversight and management, stakeholder communication, and decision making. Among the specific responsibilities identified in the charter was the development of a plan, schedule, and performance measures to guide the departments' electronic health record interoperability efforts.

Subsequent to an April 2009 Presidential announcement, the departments approved a new version of the interagency program office's charter in September to expand the office's responsibilities to include coordination and oversight of the development of a Virtual Lifetime Electronic Record (VLER).[18] Still in the planning stages, VLER is intended to enable access to all electronic records for service members as they transition from military to veteran status, and throughout their lives. According to the Director of the DOD/VA Interagency Program Office, VLER is to expand the departments' existing electronic health record capabilities by enabling access to private sector health data as well. The revised charter describes that the office is responsible for developing and maintaining a master plan, integrated master schedule, and performance metrics for the VLER initiative.

GAO Reports Have Identified the Need for DOD and VA to Improve Their Efforts to Share Health Information

Our prior reports on DOD's and VA's efforts to develop fully interoperable electronic health record systems or capabilities noted their progress and highlighted issues that the departments needed to address to achieve electronic health record interoperability. Specifically, our July 2008 report[19] noted that the departments were sharing some, but not all, electronic health information at different levels of interoperability. At that time the departments' efforts to set up the interagency program office were in the early stages. Leadership positions in the office were not permanently filled, staffing was not complete, and facilities to house the office had not been designated. Accordingly, we recommended that the Secretaries of Defense and Veterans Affairs expedite efforts to put in place permanent leadership, staff, and facilities for the program office. The departments agreed with this recommendation and have taken actions to address it.

Our January 2009 report[20] noted that the departments had defined plans to further increase their sharing of electronic health information; however, the plans did not contain results-oriented (i.e., objective, quantifiable, and measurable) performance goals and measures that could be used as a basis to track and assess progress. We recommended the departments

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[18]On April 9, 2009, the President announced that DOD and VA will work together to define and build a Virtual Lifetime Electronic Record capability to streamline the transition of electronic records between the two departments.

[19]GAO-08-954.

[20]GAO-09-268.

develop and document such goals and performance measures for the six interoperability objectives, to use as the basis for future assessments and reporting of interoperability progress. DOD and VA agreed with our recommendation and stated that the departments intended to include results-oriented goals in their future plans.

We also reported and testified in July 2009[21] that the departments were continuing to take steps toward achieving full interoperability by the September 2009 deadline. Specifically, we noted that they had identified six interoperability objectives and had fulfilled three of the six. For the remaining three objectives, DOD and VA had partially achieved planned capabilities but additional work was needed to meet the objectives. Moreover, our report and testimony also noted that the departments' interagency program office was not effectively positioned to function as a single point of accountability for achievement of full interoperability because it did not yet have fundamental IT management capabilities and was not fulfilling key responsibilities, including establishment of performance measures, a project plan, or a detailed schedule. As a result, we recommended that the departments improve management of their interoperability efforts by establishing a project plan and a complete and detailed integrated master schedule.

Although DOD and VA Have Met Their Six Interoperability Objectives, Additional Work Remains to Meet Clinicians' Evolving Needs

DOD and VA have achieved planned capabilities for the three remaining objectives (expand questionnaires and self-assessment tools, expand Essentris in DOD, and demonstrate initial document scanning). Having now met all six of their interoperability objectives, the departments' officials, including the co-chairs of the group responsible for representing the clinician user community, believe they have satisfied the September 30, 2009, requirement for developing and implementing systems or capabilities that allow for full interoperability. Nevertheless, the departments are planning additional actions to further increase their interoperable capabilities, recognizing that clinicians' needs for interoperable electronic health records are evolving.

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[21]GAO, *Electronic Health Records: Program Office Improvements Needed to Strengthen Management of VA and DOD Efforts to Achieve Full Interoperability*, GAO-09-895T (Washington, D.C.: July 14, 2009) and GAO-09-775.

The following describes the departments' activities with respect to the three remaining objectives.

Expand questionnaires and self-assessment tools: The departments intended to provide all periodic health assessment data stored in the DOD electronic health record to VA in a format that associates questions with responses. Health assessment data are collected from two sources: questionnaires administered at military treatment facilities and a DOD health assessment reporting tool that enables patients to answer questions about their health. Questions relate to a wide range of personal health information, such as dietary habits, physical exercise, and tobacco and alcohol use. While the departments had established the capability for VA to view questions and answers from the questionnaires collected by DOD at military treatment facilities, they had not yet achieved the capability for VA to view information from the second source—DOD's health assessment reporting tool. Since our last review, the departments have established this capability and have therefore met their objective.

Expand Essentris in DOD: DOD intended to expand Essentris to at least one additional site for each military service and to increase the percentage of inpatient discharge summaries that it shares electronically with VA. While the departments had previously expanded the system to two Army sites, they had not yet expanded to the remaining two military departments (Air Force and Navy). Since we last reported, the departments have met this objective by successfully deploying Essentris to an additional Air Force and Navy site. In addition, the departments expanded the system to two more Army sites and are sharing inpatient discharge summaries from 59 percent of DOD inpatient beds.[22]

Demonstrate initial document scanning: The departments intended to demonstrate an initial capability to scan service members' medical documents into the DOD electronic health record and share the documents electronically with VA. Since our last review, the departments have met this objective by successfully demonstrating the capability in a joint test environment. Specifically, DOD has demonstrated the capability to scan a medical document, associate the document with a test patient,

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[22]The Army sites are Reynolds Army Community Hospital at Fort Sill, Okla.; Moncrief Army Community Hospital at Fort Jackson, S.C.; the United States Army Hospital in Seoul, Korea; and Fort Leonard Wood Army Community Hospital at Fort Leonard Wood, Mo. The Navy site is the Naval Hospital Bremerton in Bremerton, Wash. The Air Force site is the David Grant United States Air Force Medical Center at Travis Air Force Base, Calif.

and save the document into the patient's electronic health record; and VA demonstrated the capability to search and retrieve the scanned document associated with that patient.

While the departments have met the remaining three objectives and believe they have met the September 30, 2009, deadline for achieving full interoperability as required by the act, they are planning additional work to further increase their interoperable capabilities. These actions reflect the departments' recognition that clinicians' needs for interoperable electronic health records are not static. Currently, the departments are focusing their efforts to meet clinicians' evolving needs for interoperable capabilities in the following areas.

- Clinicians have identified additional needs with respect to social history and physical exam data that have emerged since existing capabilities were made available in those areas. To meet these needs, the departments are planning additional efforts to provide, for example, the capabilities to search, sort, and filter patient social history and physical exam data based on criteria such as date, location of care, and type of document.

- DOD plans to further expand the implementation of Essentris to sites beyond those achieved as of September 2009. In this regard, the department has established a goal of making the inpatient system operational for 90 percent of its inpatient beds by January 31, 2011.

- In December 2009, DOD began limited user testing of the document scanning capability that was demonstrated in September 2009. According to department officials, this testing entails use of test data by a limited number of users at nine sites and is expected to be completed in March 2010. After that, further testing of the document scanning capability using actual data is expected at sites and dates that are to be determined.

Beyond these ongoing efforts to meet their clinicians' evolving interoperability needs, the departments have begun planning their efforts to define and build VLER. For example, in mid-December 2009, VA and a private health care provider in San Diego, California, began a pilot project to demonstrate that clinical information such as patient demographic, allergy, and active medication information can be securely sent and received. DOD plans to be added to this pilot on January 31, 2010. Further, the departments are working in cooperation with the interagency program office and the Interagency Clinical Informatics Board to define additional clinical information to be exchanged, additional functionality, and additional geographic areas of interest for future VLER deployment.

DOD/VA Interagency Program Office Has Made Progress toward Filling Positions, but Has Not Fully Implemented Recommended Management Improvements

The interagency program office is not yet positioned to function as a single point of accountability for the implementation of interoperable electronic health record systems or capabilities. Since we last reported, the departments have made progress in setting up the office by hiring additional staff, including a permanent director. In addition, consistent with our prior recommendations, the office has begun to demonstrate responsibilities outlined in its charter in the areas of scheduling, planning, and performance measurement. However, the office's efforts to develop its capabilities in these areas are incomplete.

Staffing of the Interagency Program Office Is Nearly Completed

Among the activities the departments identified in the September 2008 DOD/VA Information Interoperability Plan as necessary for setting up the interagency program office were appointing a permanent director and deputy director, as well as recruiting and hiring staff. Since we last reported in July 2009,[23] DOD appointed a permanent director to lead the office, effective October 27, 2009. Also, VA filled the permanent deputy director position, effective January 17, 2010.[24]

According to the former acting deputy director, the departments have also filled 13 of 14 government staff positions, an increase of 3 staff since our last report.[25] Additionally, this official stated the departments have taken steps to fill the remaining senior health program analyst position. He reported that a selection had been made to fill this remaining position, but a date for when this position would be filled remained to be determined.

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[23]GAO-09-775.

[24]The director is a DOD employee and the deputy director is a VA employee.

[25]The office staff include both government and contractor personnel.

Interagency Program Office Has Not Fully Established a Schedule, Plan, or Performance Measures

As previously noted, DOD, VA, and the interagency program office developed a new version of the office's charter in September 2009. Consistent with the office's original charter, the new version describes the office's responsibilities in carrying out its mission and function associated with attaining interoperable electronic data. For example, it identifies the office's responsibilities to develop an integrated master schedule, plan, and performance metrics to monitor the departments' performance against interoperability goals. Since we last reported, the office has taken steps toward developing, but has not yet fully established, these management tools.

We previously recommended in July 2009 that the program office establish a complete and detailed master schedule to improve its management of the departments' efforts to achieve fully interoperable electronic health record systems.[26] In response to our recommendation, the office has begun to develop an integrated master schedule that includes information about its ongoing interoperability activities, including VLER. For example, the schedule identifies the limited user testing of the document scanning capability that DOD plans between December 2009 and March 2010. However, the schedule does not include information about the tasks, resource needs, or relationships between tasks for the testing activity. The office's acting deputy director stated that the program office is currently working to improve the schedule by including task dependencies to help in identifying the critical path for the office's interoperability activities.[27]

Similarly, we recommended that the program office establish a project plan, which is an important tool for effective IT program management. The program office has concurred with the recommendation and has reported that it is developing a master program plan.[28] In January 2010, department officials stated that this plan is undergoing review by the departments and is expected to be approved in February 2010.

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[26]GAO-09-775.

[27]The critical path is the single longest path of activities through a project's schedule. Each day of delay in the critical path could delay the completion of the entire project.

[28]The plan was originally considered a project plan in the previous charter, but the name was changed to a program plan, which according to the former interim director of the program office, represents a higher level of oversight that is required of the interagency program office.

In January 2009 we recommended that DOD and VA take action to complete results-oriented (i.e., objective, quantifiable, and measurable) goals and performance measures to be used as a basis for the office to provide meaningful information on the status of the departments' interoperability initiatives. In November 2009, program office officials stated that such goals and measures would be included in the next version of the VA/DOD Joint Executive Council Joint Strategic Plan (known as the joint strategic plan), which the office expects to be approved in February 2010.[29]

While the departments have agreed with our past recommendations and have indicated that they are working toward addressing them, officials stated that other priorities have prevented full implementation of our recommendations. Specifically, the office has been focused on verifying achievement of the six interoperability objectives. Moreover, according to the former interim director, the office was focused on providing briefings and status information on activities the office has undertaken to achieve interoperability, in addition to participating in the departments' efforts to define VLER. In addition, the office director told us that it has taken the departments longer than anticipated to provide the detailed information that is needed by the office to prepare a schedule for joint interagency data sharing goals.

While the interagency program office is nearly fully staffed and has begun to establish important management tools, it has not yet completed an integrated schedule, project plan, and results-oriented goals and measures. As a result, the interagency program office's ability to effectively provide oversight and management, including meaningful progress reporting on the delivery of interoperable capabilities, is jeopardized. If the departments fully implement our recommendations, they will have the comprehensive picture that they need for effectively defining and managing progress toward meeting their interoperability objectives and goals, including VLER. Furthermore, implementation of our recommendations will also better position the office to function as a single point of accountability for the delivery of interoperable electronic health records, which are intended to improve service members' and veterans' health care.

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[29]In July, we reported that the office had expected to complete the joint strategic plan by December 2009, but in interviews with program office officials, we were told that the plan would not be released until February 2010 as part of the presidential budget submission.

Agency Comments and Our Evaluation

In written comments on a draft of this report, the DOD official who is performing the duties of the Assistant Secretary of Defense (Health Affairs), the VA Chief of Staff, and the Director of the DOD/VA Interagency Program Office concurred with our findings. Beyond its concurrence with our findings, the VA Chief of Staff provided information regarding the department's efforts to address recommendations from our prior reports.[30] For example, in response to our previous recommendation that the departments use results-oriented performance goals and measures as the basis for future assessments and reporting of interoperability progress, the Chief of Staff stated that the departments have prepared draft goals and measures for their joint strategic plan, which is to be finalized in February 2010. Additionally, in response to our prior recommendation that the departments establish a project plan and a compete and detailed integrated master schedule to improve management of their interoperability efforts, the Chief of Staff asserted that the interagency program office expects to have a draft project plan by the end of January 2010 and that VA meets monthly with DOD and the program office to coordinate input into an integrated master schedule. If the departments continue to implement our recommendations, they should be better positioned to effectively manage their ongoing efforts to increase their interoperable electronic health record capabilities. DOD and the interagency program office also provided technical comments on the draft report, which we incorporated as appropriate. Comments from the Departments of Defense and Veterans Affairs, and the DOD/VA Interagency Program Office are reproduced in appendixes II, III, and IV, respectively.

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[30]GAO-09-268 and GAO-09-775.

We are sending copies of this report to the Secretaries of Defense and Veterans Affairs, appropriate congressional committees, and other interested parties. In addition, the report is available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staffs have questions about this report, please contact me at (202) 512-6253 or willemssenj@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix V.

Joel C. Willemssen
Managing Director, Information Technology

List of Congressional Committees

The Honorable Carl Levin
Chairman
The Honorable John McCain
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Daniel K. Akaka
Chairman
The Honorable Richard M. Burr
Ranking Member
Committee on Veterans' Affairs
United States Senate

The Honorable Daniel K. Inouye
Chairman
The Honorable Thad Cochran
Ranking Member
Subcommittee on Defense
Committee on Appropriations
United States Senate

The Honorable Tim Johnson
Chairman
The Honorable Kay Bailey Hutchison
Ranking Member
Subcommittee on Military Construction,
    Veterans' Affairs, and Related Agencies
Committee on Appropriations
United States Senate

The Honorable Ike Skelton
Chairman
The Honorable Howard P. "Buck" McKeon
Ranking Member
Committee on Armed Services
House of Representatives

The Honorable Bob Filner
Chairman
The Honorable Steve Buyer
Ranking Member
Committee on Veterans' Affairs
House of Representatives

The Honorable John P. Murtha
Chairman
The Honorable C.W. Bill Young
Ranking Member
Subcommittee on Defense
Committee on Appropriations
United States House of Representatives

The Honorable Chet Edwards
Chairman
The Honorable Zach Wamp
Ranking Member
Subcommittee on Military Construction,
   Veterans' Affairs, and Related Agencies
Committee on Appropriations
House of Representatives

Appendix I: Scope and Methodology

To determine the extent to which the Department of Defense (DOD) and the Department of Veterans Affairs (VA) developed and implemented electronic health record systems or capabilities that allowed for full interoperability by the September 30, 2009, deadline, we reviewed our previous work on DOD and VA efforts to develop health information systems, interoperable health records, and interoperability standards to be implemented in federal health care programs. We obtained and analyzed agency documentation and interviewed program officials to determine the departments' progress toward achieving full interoperability by September 30, 2009, as required by the National Defense Authorization Act for Fiscal Year 2008. Specifically, we compared the departments' interoperability plans, objectives, and requirements with the reported status of efforts to achieve full interoperability, corroborating officials' statements about progress through analyses of available documentation including test results and status reports. In addition, we analyzed agency plans and interviewed cognizant DOD and VA officials to determine the work required to meet additional clinician requirements and increase interoperability of electronic health information beyond September 30, 2009.

To determine whether the interagency program office was functioning as a single point of accountability for developing and implementing electronic health records, we obtained and reviewed program office documentation, including its new charter and its integrated master schedule. We compared the responsibilities identified in the charter with actions taken by the office to exercise the responsibilities. Additionally, we interviewed interagency program office officials to determine the status of filling leadership and staffing positions within the office and to examine the level to which the departments have addressed our prior recommendations to develop needed management tools including results-oriented (i.e., objective, quantifiable, and measurable) goals and performance measures, a complete and detailed master schedule, and a project plan.

We conducted this performance audit at DOD offices and the DOD/VA Interagency Program Office in the greater Washington, D.C., metropolitan area from September 2009 through January 2010, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

JAN 2 2 2010

Mr. Joel C. Willemssen
Managing Director, Information
  Technology
U.S. Government Accountability Office
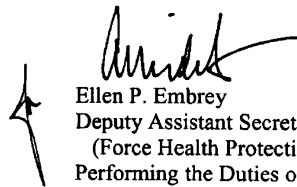441 G Street, N.W.
Washington, DC 20548

Dear Mr. Willemssen:

This is the Department of Defense's (DoD) response to the Government Accountability Office (GAO) Draft Report, GAO-10-332, "ELECTRONIC HEALTH RECORDS: DoD and VA Interoperability Efforts Are Ongoing; Program Office Needs to Implement Recommended Improvement," January 12, 2010, (Engagement Code 310945).

DoD acknowledges receipt of the draft audit report and concurs with the overall findings. We have provided suggested technical corrections in the enclosed formal response.

Thank you for the opportunity to review and comment on the draft report. The points of contact for additional information are Ms. Lois Kellett, Lois.Kellett@tma.osd.mil, or (703) 681-8836, and Mr. Gunther Zimmerman, Gunther.Zimmerman@tma.osd.mil, or (703) 681-4360.

Sincerely,

Ellen P. Embrey
Deputy Assistant Secretary of Defense
  (Force Health Protection and Readiness)
Performing the Duties of the
  Assistant Secretary of Defense
  (Health Affairs)

Attachments:
As stated

Appendix III: Comments from the Department of Veterans Affairs

THE SECRETARY OF VETERANS AFFAIRS
WASHINGTON

January 22, 2010

Mr. Joel C. Willemssen
Managing Director
Information Technology
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Willemssen:

The Department of Veterans Affairs (VA) has reviewed the Government Accountability Office's (GAO) draft report, *ELECTRONIC HEALTH RECORDS: DOD and VA Interoperability Efforts Are Ongoing; Program Office Needs to Implement Recommended Improvements* (GAO-10-332), and concurs with GAO's findings.

Enhancing health information sharing between VA and the Department of Defense (DoD) is a key step towards achieving seamless health care for our Nation's Veterans. The report accurately states that, even though VA and DoD have now met the six objectives necessary for achieving full interoperability, the Departments are planning further actions to increase interoperable capability.

The enclosure provides a status update on recommendations from previous related reports: (1) Electronic Health Records: DoD and VA Sharing of Information Could Benefit from Improved Management (GAO-09-268); and (2) Electronic Health Records: DoD and VA Efforts to Achieve Full Interoperability Are Ongoing; Program Office Management Needs Improvement (GAO-09-775).

VA appreciates the opportunity to comment on your draft report.

Sincerely,

John R. Gingrich
Chief of Staff

Enclosure

Enclosure

The Department of Veterans Affairs (VA) Comments to
Government Accountability Office (GAO) Draft Report

*ELECTRONIC HEALTH RECORDS: DOD and VA Interoperability Efforts Are
Ongoing; Program Office Needs to Implement Recommended Improvements*
(GAO-10-332)

**Outstanding Recommendations from GAO Report, *ELECTRONIC HEALTH
RECORDS: DOD's and VA's Sharing of Information Could Benefit from Improved
Management* (GAO-09-268).**

*GAO Recommendation: To better ensure that DOD and VA achieve interoperable
electronic health record systems or capabilities, GAO recommends that the Secretaries
of Defense and VA take the following actions:*

Recommendation 1: Develop results-oriented (i.e., objective, quantifiable, and
measurable) goals and associated performance measures for the Departments'
interoperability objectives and document these goals and measures in their
interoperability plans.

VA Status Update January 2010: By agreement of VA and DOD, and as verified by
the DoD and VA Interagency Program Office, the Departments successfully achieved
the interoperability objectives contained in the fiscal year 2008 National Defense
Authorization Act (NDAA). The NDAA required the Departments to implement systems
allowing for full interoperability by September 2009.

Recommendation 2: Use results-oriented performance goals and measures as the
basis for future assessments and reporting of interoperability progress.

VA Status Update January 2010: VA and DoD have prepared draft results-oriented
goals and performance measures related to future interoperability objectives for the
DoD and VA Joint Strategic Plan (JSP) for 2010-2012. The Departments anticipate that
the JSP will be finalized and signed by departmental leadership in February 2010.

**Outstanding Recommendation from GAO Report, *ELECTRONIC HEALTH
RECORDS: DOD's and VA's Efforts to Achieve Full Interoperability Are Ongoing;
Program Office Management Needs Improvement* (GAO-09-775).**

Recommendation 1: To better improve management of VA's and DOD's efforts to
achieve fully interoperable electronic health records systems, including satisfaction of
the departments' interoperability objectives, GAO recommends that the Secretaries of
Defense and VA direct the Director of the Interagency Program Office to establish a
project plan and a complete and detailed integrated master schedule.

Enclosure

The Department of Veterans Affairs (VA) Comments to
Government Accountability Office (GAO) Draft Report

***ELECTRONIC HEALTH RECORDS: DOD and VA Interoperability Efforts Are
Ongoing; Program Office Needs to Implement Recommended Improvements***
(GAO-10-332)

VA Status Update January 2010: The Interagency Program Office (IPO) has
developed an integrated master schedule and the Veterans Health Administration's
Office of Health Information continues to work closely with VA's Office of Information
Technology, the lead office, to continue to enhance the schedule. VA, DoD, and the IPO
now meet at least once a month to coordinate interagency input. The IPO reports that it
is on target to provide a draft project plan by the end of January 2010.

Appendix IV: Comments from the DOD/VA Interagency Program Office

Mr. Joel C. Willemssen
Managing Director, Information
  Technology
U.S. Government Accountability Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Willemssen:

This is the DoD/VA Interagency Program Office's (IPO) response to the Government Accountability Office (GAO) Draft Report, GAO-10-332, "ELECTRONIC HEALTH RECORDS: DoD and VA Interoperability Efforts Are Ongoing; Program Office Needs to Implement Recommended Improvement," January 12, 2010, (Engagement Code 310945).

IPO acknowledges receipt of the draft audit report and concurs with the overall findings. We have provided suggested technical corrections in the enclosed formal response.

Thank you for the opportunity to review and comment on the draft report. The points of contact for additional information are Mr. Ryan Cool, Ryan.Cool@osd.mil, or (703) 696-3636, and Mr. Kevin Tewes, Kevin.Tewes@osd.mil, or (703) 696-2856.

Sincerely,

Debra M. Filippi
Director
DoD/VA Interagency Program Office

Attachments:
As stated

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact

Joel C. Willemssen, (202) 512-6253 or willemssenj@gao.gov

Staff Acknowledgments

In addition to the contact named above, key contributions to this report were made by Mark Bird, Assistant Director; Rebecca Eyler; J. Michael Resser; and Kelly Shaw.